

What is claimed is:

1. A solar cell comprising:
  - (a) an illuminable semiconductor element having a top surface portion of a first conductivity type, said top surface having two adjacent edges forming a corner;
  - (b) a reverse surface portion of opposite conductivity type, forming with said top surface portion a p-n junction;
  - (c) a low resistivity electrically conducting electrode strip directly bonded to said two adjacent edges of said top surface, said strip extending along the length of said edges from said corner at least one-half the length of said adjacent sides, thereby defining a V-shape congruent with said corner; and
  - (d) an electrically conductive area on the reverse surface adjacent a different corner thereof.
2. A solar cell according to claim 1 whose electrically conductive area is at an opposite corner from said strip and extends more than half the distance of each side from the corner.
3. A solar cell according to claim 1 and comprises on the back side thereof a coating consisting essentially of a material of the class of colloidal carbon, black paint or metallic black.
4. A photovoltaic generator comprising in combination:
  - (a) a plurality of solar cells as defined in claim 1;
  - (b) the solar cells being arranged with the top surfaces thereof facing a common direction to receive radiation, and the cells being physically and electrically attached to each other at the their respective conductive strip and area with the conductive strip portion on each side of the corner of one cell each being attached to the conductive area of another cell, and the conductive area of one cell being attached to conductive strip of two other cells.
5. A photovoltaic generator according to claim 4 in which the solar cells thereof are of the triangle shape.

6. A photovoltaic generator according to claim 4 in which the solar cells thereof are of the diamond shape.

7. A photovoltaic generator according to claim 4 in which the solar cells thereof are of the hexagonal shape.

8. A photovoltaic generator as defined in claim 1 and comprising a thermally emissive coating on the back side of said solar cells.

9. A photovoltaic generator according to claim 8 wherein the thermally emissive coating comprises essentially a material of the class consisting of colloidal carbon, black paint or metallic black.

#### References Cited

##### UNITED STATES PATENTS

Re. 25,647	9/1964	Mann et al. ....	136—89
2,780,765	2/1957	Chapin et al. ....	136—89
2,938,938	5/1960	Dickson .....	136—89
2,989,575	6/1961	Wallace .....	136—89
2,993,945	7/1961	Huth .....	136—89
3,005,862	10/1961	Escoffery .....	136—89
3,038,952	6/1962	Ralph .....	136—89
3,076,861	2/1963	Samulon et al. ....	136—89
3,175,929	3/1965	Kleinman .....	136—89
3,232,795	2/1966	Gillette et al. ....	136—89

##### OTHER REFERENCES

W. R. Cherry: "Proc. 14th Annular Power Sources Conf.," May 1960, pp. 37-42.

W. L. Crawford et al.: "IBM Technical Disclosure Bulletin," vol. 4, No. 11, April 1962, p. 62.

B. Dale et al.: "Proc. 14th Annual Power Sources Conf.," May 1960, pp. 22 and 23.

ALLEN B. CURTIS, *Primary Examiner*.

WINSTON A. DOUGLAS, *Examiner*.

A. M. BEKELMAN, *Assistant Examiner*.